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BEFORE THE POSTAL REGULATORY COMMISSION WASHINGTON, DC 20268-0001

Statutory Review of the System)	
for Regulating Rates and Classes)	Docket No. RM2017-3
for Market Dominant Products)	

EXPERT DECLARATION OF ROBERT D. WILLIG, PhD

IN SUPPORT OF COMMENTS OF
THE ALLIANCE OF NONPROFIT MAILERS,
THE ASSOCIATION FOR POSTAL COMMERCE,
MPA-THE ASSOCIATION OF MAGAZINE MEDIA,
THE AMERICAN CATALOG MAILERS ASSOCIATION,
THE NONPROFIT ALLIANCE,
THE DIRECT MARKETING ASSOCIATION OF WASHINGTON,
THE ENVELOPE MANUFACTURERS ASSOCIATION,
AND THE SATURATION MAILERS COALITION

February 3, 2020

I. Introduction and Qualifications

- 1. My name is Robert D. Willig. I am Professor of Economics and Public Affairs Emeritus at Princeton University where I held a joint appointment in the Economics Department and at the Woodrow Wilson School of Public and International Affairs from 1978 until 2016. Previously, I was a Supervisor in the Economics Research Department of Bell Laboratories. My teaching and research have specialized in the fields of industrial organization, government-business relations, and social welfare theory. I continue to teach the graduate course at Princeton "Legal and Regulatory Policy Towards Markets" as Lecturer with the Rank of Professor. I served as Deputy Assistant Attorney General for Economics in the Antitrust Division of the United States Department of Justice from 1989 to 1991, and in that capacity served as the Division's Chief Economist.
- 2. I have authored some 80 articles in the economics literature, and am the author of Welfare Analysis of Policies Affecting Prices and Products and Contestable Markets and the Theory of Industry Structure (with W. Baumol and J. Panzar). I was a co-editor of The Handbook of Industrial Organization, which summarized the state of economic thinking on the structure of industries and the nature of competition among firms, and served on the editorial boards of the American Economic Review, the Journal of Industrial Economics and the MIT Press Series on Regulation. I am an elected Fellow of the Econometric Society and was an associate of The Center for International Studies.
- 3. I have developed and applied research and expertise on market structure, competitive conduct, contractual relations, optimal pricing, intellectual

property rights, antitrust policy and government regulation of business. I have been a consultant on those subjects to governments, to international organizations like the World Bank and OECD, and to international firms in many sectors of the economy, including telecommunications, transportation, health care, pharmaceuticals, aeronautics, automobiles, information technology, chemicals, mining, energy, consumer products, entertainment and financial markets. I have appeared as an expert witness in the United States before Congress, federal and state courts, federal administrative agencies, and state public utility commissions. I am a Senior Consultant for and co-founder of the international economic consulting firm Compass Lexecon.

- 4. I have been involved throughout my career in the theoretical design, practical improvement and implementation details of government regulation of market structure and pricing of infrastructure services including telecommunications, railroad freight, electricity, ports, pipelines and postal operations. This work has been a source of inspiration and application for my research, teaching and consulting.
- 5. My full curriculum vitae is included as an attachment to this declaration. I reserve the right to supplement or modify my comments in light of new information that may become available to me, including but not limited to other comments and reply comments in this proceeding.

II. Assignment and Summary of Conclusions

A. Assignment

I have been retained by counsel for MPA – The Association of Magazine Mediato provide an independent expert opinion, from an economic perspective,

regarding two proposals of the Postal Regulatory Commission (PRC) discussed in Order No. 5337 of the Statutory Review of the System for Regulating Rates and Classes for Market Dominant Products: 1) PRC's proposal to grant the US Postal Service (USPS) above-CPI pricing authority related to declining mail density; and 2) PRC's proposal to include a performance-based adder granting extra pricing authority for productivity improvements.¹

B. Summary of Conclusions

7. My primary conclusion is that, contrary to the PRC's claim that the two proposals outlined above "are consistent with price cap theory," indeed, the opposite is true: they are highly inconsistent with price cap theory. Specifically, the density-related proposal would compensate the Postal Service every year for any mail volume losses during the prior or previous years, thereby eliminating any Postal Service incentives to operate efficiently and appealingly to stem further volume declines. The performance-based proposal is poorly designed: it is vulnerable to gainful counterproductive manipulation and fails to incentivize the Postal Service to maximize its productivity. Overall, I find that these proposals, under the guise of price caps, in fact turn the principles of price cap regulation upside down and are completely adverse to any system of economically efficient incentive regulation. The resulting price cap may be so high that it will not provide the meaningful benefits usually associated with this form of incentive regulation.

¹ Order No. 5337, Statutory Review of the System for Regulating Rates and Classes for Market Dominant Products (Docket No. RM2017-3), Revised Notice of Proposed Rulemaking, U.S. Postal Regulatory Commission, December 5, 2019 (hereinafter "Order") at pp. 77-80, 148-150.

² Order at p. 34.

III. Objectives of Incentive Ratemaking and the Use of Price Caps

- 8. Price cap regulation, a common mechanism in regulated industries, is used by the PRC to regulate market-dominant postage rates in the United States. Price caps aim to prevent excessive prices in industries in which the regulator doubts that competition is sufficiently effective by itself to preclude overpricing, while avoiding the significant social costs of rate of return and cost-plus regulation. The primary virtues of price cap regulation include: a) its direct control of overall prices instead of a related variable such as earnings that does not directly affect consumer welfare, b) the freedom it allows the regulated firm to choose its own relative prices subject to the constraint of the cap, and c) its function as a regulatory mechanism that can be shown analytically to comport with the competitive market model in offering consumers all the price protection that effective competition can provide, while presenting the regulated firm with incentives to operate with static and dynamic efficiency in its costs, price structure, and its choices of the characteristics of its products and services.³ Thus, well designed price caps are beneficial to both consumers and the regulated entity.
- 9. Price cap regulation was invented to avoid the misincentives and social harms that are known to result from a cost-plus and from a rate of return price regulation system.⁴ Cost-plus price regulation allows prices to rise in response

³ Baumol, W.J. and R.D. Willig, "Price Caps: A Rational Means to Protect Telecommunications Consumers and Competition," *Review of Business*, Spring 1989 (hereinafter, "Baumol-Willig (1989)") at p. 3.

⁴ *Ibid.* Also *see* Sappington, D.E. and D.L. Weisman, "Price Cap Regulation: What Have We Learned from 25 Years of Experience in the Telecommunications Industry?," *J Regul Econ*, 2010, 38:227–257 at p. 230 ("ROR [rate-of-return regulation] can foster industry investment by ensuring a high

to higher costs experienced by the regulated firm. Of course, such regulation is motivated by the understandable aspiration to keep prices and the revenues they generate in line with costs, as real effective competition would accomplish. However, where competition cannot be counted on, as in circumstances characterized by natural monopoly, cost-plus regulation inadvertently but nonetheless powerfully presents the firm with incentives to allow its costs to rise, because not only will correspondingly permitted increased prices cover the excess costs, but they will provide extra profits from the "plus." Similarly, under rate of return regulation, the firm is permitted to raise prices to cover increases in costs, and forced to lower prices if costs should fall, thus undermining incentives to cut costs and to avoid cost increases. Worse yet, since the firm's profits are gaited by the allowed rate of return on the firm's capital base, the firm is motivated to increase its capital base well beyond the level of efficiency for product quality and savings of variable costs, and prices will be higher to generate the allowed rate of return on the excess capital.

likelihood of a reasonable return on investment... However, to the extent that ROR requires the regulated firm to reduce its prices as its realized production costs decline (and thus its realized earnings rise), ROR can limit the firm's incentive to reduce its operating costs. Thus, although ROR can ensure that the firm's actual return on investment never departs too radically from what is deemed to be a reasonable return, ROR may discourage innovation and cost reduction of all forms (e.g., the elimination of unnecessary perquisites for employees of the regulated firm). In contrast, PCR [price cap regulation] can promote innovation and cost reduction by severing the link between realized costs and allowed prices (at least temporarily). PCR secures these enhanced incentives by permitting the firm's actual returns to diverge substantially from anticipated returns.") and R.R. Breautigam and J.C. Panzar, "Effects of the Change from Rate-of-Return to Price-Cap Regulation," AEA Papers and Proceedings, May 1993, pp. 191-198 at pp. 191, 193 ("We first characterize some of the difficulties that have led regulators to move away from traditional rate-of-return (cost-based) regulation and toward systems of regulation that provide incentives for increasingly efficient production, allowing firms to share in the social gains from efficiency with increased profits . . . The first is price-cap (PC) regulation, which typically allows the firm to choose a set of prices for designated services so that an index of the prices does not exceed some level . . . PC regulation is a contract between the government and a regulated firm, a form of regulation of particular interest in a world in which regulated firms know more about their costs and technological opportunities than regulators do. Much of the original excitement about PC's stemmed from the hope that a contract specifying PC's would induce the regulated firm to minimize its production costs and pursue economically efficient innovation.").

- 10. Moreover, under both cost-plus and rate of return regulation, if the firm were to successfully elevate demand for its products and services through improvements in their quality, appeal, selection or marketing, without excessive costs, the consequence would be regulatory compulsion to lower prices so as to eliminate the resulting violation of the cost plus or rate of return constraint on profits. Of course, this thoroughly undermines or eliminates the incentives firms have outside of regulated markets to raise demand by improving what they do to the benefit of their consumers. And worse yet, where diminution of demand would elevate average costs due to scale economies, the firm under such regulation would not be exposed to incentives to avoid diminishing the appeal of its products and services because loss of demand would generate regulatory permission to compensate with higher prices.
- 11. In dramatic contrast, under a genuine price cap system of regulation, the prices that are allowed to be charged do not rise with increases in the costs incurred by the firm, nor with increases in the firm's capital stock, nor with diminutions in the consumer demand for the firm's outputs. And prices are not pushed down by the regulation in the event that the firm's productivity rises, costs fall or demands for the firm's products and services increase. In essence, this is why the concept of a price cap system of regulation both protects consumers from excessive pricing where effective competition is absent, while still presenting the firm with strong incentives to behave competitively since it will be rewarded at its bottom line for its productivity, cost control and market appeal.
- 12. Under a price cap system, price changes should be capped by the consumer price index (CPI) or some other index measuring inflation in the economy,

minus X, where X is the anticipated difference between changes in costs in the industry that are exogenous as compared to the CPI.⁵ In price cap theory, X should be open to renegotiation at stipulated intervals, such as every 4 or 5 years. These renegotiations should take into account for the determination of the new going-forward value of X valid factors of exogeneous anticipated trends such as improvements in the industry's technology, or changes in the anticipated rates of inflation in the industry's input prices and wages, or alterations in the firm's mandated outputs, or thinning of the volume of demands where there are scale economies. However, emergency too-soon changes in X or backward looking true-ups are to be strongly discouraged in an optimal system on incentive grounds. The negotiated X intentionally leaves some risks to each side arising from exogenous cost or demand changes that are lower or higher than was anticipated and covered by X.

13. The price cap approach provides significant economic and social benefits including consumer price protection and the stimulation of innovation and productivity growth. In general, while profits are sometimes derived from the exercise of market power, often and importantly they are the consequence of superior innovation and other elements of performance. Because there is no practical way to reliably and consistently prove from which of these two sources high earnings of a particular firm come, regulators under a rate of return or cost-plus regime have essentially been forced to prohibit all earnings, regardless of source, above some level selected by the regulator as the "fair" return or permitted mark-up. This situation effectively deprives the regulated entity of the opportunity to earn a financial reward through superior

⁵ Note that X can be negative.

productivity or service quality performance.⁶ Therefore, the regulated entity is disincentivized from trying to achieve outstanding productivity and service improvements. Instead, properly-designed price cap regulation provides incentives for the firm to reduce costs by allowing it to share in the cost savings that also benefit consumers, as would occur in a well-functioning competitive industry. It is crucial that the regulated entity and consumers should prospectively share in the risk of cost increases that are higher, ex post, than expected; and conversely, they should also share in possible benefits of cost-reducing and demand-increasing static and dynamic efficiencies that are higher than expected.⁷

14. Given that an important purpose of price cap regulation is to stimulate productivity growth and innovation, it is vital that the regulated entities are permitted to retain a portion of the benefits resulting from any such improvements that they generate. Moreover, a portion of the benefits should also be passed on to consumers, as would occur in a competitive market:

At the periodic price cap adjustment dates, instead of simply raising the price caps to match the rate of increase of some price index, serving as the measure of inflation, it will deduct from the rate of increase in the price index an amount which we will call X, and which can be interpreted as the productivity pass through to the consuming public. X, therefore, represents the automatic reduction in the real levels of the price caps, intended to constitute the share of the industry productivity achievements that will accrue immediately to the public.⁸

⁶ Baumol-Willig (1989) at pp. 3-4.

⁷ A shortcoming of price cap regulation is the possibility that price caps will be set at inappropriate levels. For example, if the value of the cap is set too high, and if competition is not an adequate constraint on price, consumers are likely to be harmed by prices exceeding competitive levels.

⁸ Baumol-Willig (1989) at p. 5 (italics added).

This approach to price cap regulation may be referred to as the "price index minus X," where X is a predetermined percentage reflecting a productivity growth target, which would remain in effect for an extended period of time, such as 4-5 years.

15. The economic logic of a productivity incentive mechanism in the price cap adjustment is simple. When a regulated entity's productivity growth performance is lower than the productivity target, the entity automatically incurs a penalty similar to what a firm in an unregulated competitive market suffers if its productivity growth is lower than its competitors. And the inverse is also true: if the entity's productivity growth performance is higher than the target, the entity receives a reward akin to the benefits of having higher productivity growth than one's competitors.

IV. PRC's Proposal to Grant the USPS Above-CPI Pricing Authority Related to Declining Mail Density Violates the Basic Principles of Incentive Ratemaking and the Use of Price Caps

A. Summary of Proposal

16. The PRC proposes to "modify the price cap to permit additional pricing authority based on increases in per-unit cost that are driven by measured declines in year-over-year density, which are outside of the Postal Service's direct control." Density in this context refers to the volume per delivery point, and, according to the PRC, the Postal Service does not have direct control over

⁹ Order at p. 77.

density.¹⁰ The amount of density rate authority in the PRC proposal is the greater of zero and the following formula:¹¹

$$-1*\frac{IC_T}{TC_T}*\%\Delta D_{[T-1,T]}$$

Where,

T = most recently completed fiscal year;
T-1 = fiscal year prior to year T;
IC_T = institutional cost in fiscal year T;
TC_T = total cost in fiscal year T; and
%∆D_[T-1,T] = Percentage change in density from fiscal year T-1 to fiscal year T.

- 17. Density is defined as the ratio of mail volume to the number of delivery points, and the percentage change in density is thus calculated as the percentage change in that ratio from one fiscal year to the next.¹² The year-over-year (YOY) change in density is calculated in two ways: 1) YOY change in total density and 2) YOY change in market-dominant density, and the PRC selects the YOY value which results in less additional rate authority.¹³
- 18. Costs are broadly categorized as either attributable or institutional, with the former being predominantly incremental costs of classes of mail and the latter

¹⁰ Order at p. 64. Note that I do not necessarily accept for purposes of this declaration the PRC's characterization of mail density as being entirely exogenous. The Postal Service can surely influence factors such as product marketing, pricing, and quality of service that directly or indirectly impact mail volume per delivery point.

¹¹ Order at p. 78.

¹² Order at p. 72.

¹³ Order at p. 79. Postal Service products are divided into two categories: market-dominant and competitive. The market-dominant category includes First Class Mail, Marketing Mail, Periodicals, Package Services such as Library Mail, and some Extra Services, like Certified Mail. The competitive category includes Priority Mail, Priority Mail Express and commercial package services, such as Parcel Select (see, *e.g.*, "USPS explains how product prices are set," *Postal Times*, March 22, 2018, available at https://www.postaltimes.com/postalnews/usps-explains-how-product-prices-are-set/ (site visited Jan. 1, 2020).

the remainder. The percentage change in density is multiplied by institutional cost as a percentage of total cost, which is multiplied by -1. According to the PRC, the "proposed formula relies on the institutional cost ratio to approximate how much the year-over-year decrease in density drives an increase in per-unit cost."¹⁴

19. The PRC includes historical examples showing the hypothetical amount of density rate authority that would have been authorized in each fiscal year from 2013 through 2019. The hypothetical amount of density rate authority is always greater than zero, ranging from 0.36% (2017) to 2.69% (2013), and the final calculation always uses the YOY change in total density rather than that just for the market-dominant services.¹⁵

B. Critique of Proposal

20. In the fashion described above, the PRC's proposal includes a formula-based density adder to the price cap that is said to be tied to cost increases caused by measured year-over-year declines in mail density. This would be a counterproductive element of any system of incentive ratemaking. In certain circumstances it could be appropriate for a price cap system to account for declining volume, but the approach to doing so should be prospective, with an element of risk sharing on both sides of the market. It is crucial to recognize that adjustments to allowed prices that are based on actual, measured volume

Order at p. 71. The PRC further proposes that the Postal Service will file a notice with the commission by December 31 of each calendar year that "calculates the amount of additional rate authority available as a result of declines in density measured in the previous fiscal year." (Order at pp. 78-79). The PRC will then review the calculation and determine how much density rate authority will be authorized, and the Postal Service will have twelve months to implement a rate change incorporating any authorized density rate authority. (Order at p. 79).

loss every year are decidedly contrary to the fundamental concept of price caps and would confer dysfunctional incentives on the regulated entity.

- 21. Rather than basing the adjustment on actual, measured volume losses each year, a target could be established based on the predicted future decline in mail density. While the level of this target may be informed by past experience, it should not be conflated with an attempt to make up for any past losses. Doing so would thoroughly undermine the efficiency incentives of the price cap mechanism because the regulated firm could look forward to true-up compensation as a replacement for its needed efforts to control cost increases and volume losses.
- 22. Under incentive-based price cap regulation, the allowed price adjustment would be derived from the target, which is the anticipated difference between changes in costs in the industry that are exogenous as compared to the CPI (and open to renegotiation every 4-5 years). Of course, it is crucial that any such added allowed price increases be geared to any cost increases that are predicted to result from the predicted decreases in volume. Allowed price increases greater than those that would cover any predicted cost increases from predicted losses of volume are just disguised unwarranted elevations in prices.
- 23. In contrast, allowed price increases that are geared to provide no more than the additional revenues needed to cover any predicted additional costs resulting from predicted volume losses would intentionally and transparently allow for risk sharing between the Postal Service and its customers, the ratepayers. For example, if the density decline is higher than expected, the Postal Service would bear more of the burden (because the additional pricing

authority would be capped at the target level), and if the reverse were true, ratepayers would bear more of the burden.

24. Moreover, this approach would provide an incentive for the Postal Service to limit density declines to the extent it can because it would directly benefit. For example, the Postal Service could limit density declines by improving service and enhancing its marketing efforts. In contrast, the PRC's proposal in effect rewards the Postal Service for density declines by providing additional annual pricing authority retroactively without providing any built-in incentive for the Postal Service to limit density declines (to the extent it can do so, even indirectly). It also places all of the risk of volume declines on ratepayers, thereby breaking the implicit bargain of shared risk inherent in a genuine price cap system of incentive regulation.

V. PRC's Proposal to Include a Performance-Based Adder Is Deeply Flawed and Inconsistent with Sound Economic Theory

A. Summary of Proposal

25. The PRC proposes to institute a "performance-based rate authority in the amount of 1 percentage point per annum for each class of mail. The availability of this performance-based rate authority is conditioned on achieving the benchmark performance measure for efficiency gains and adhering to the

¹⁶ I also observe that a third PRC proposal links the award of above-inflation pricing authority to the Postal Service's past retirement benefit funding obligations. Order at pp. 95-104. This retirement based authority is similarly tied to volume movements YOY, such that if volume falls the retirement price authority rises to enable payment of that year's amortization. Of course, as with the density adder, this feature is adverse to incentives to preserve volume and violates price cap principles. Moreover, if the Postal Service's retirement benefit funding obligations were built into the level of allowed prices previously, then it would be highly problematic to allow the Postal Service pricing authority that effectively lets the Postal Service collect this cost a second time. This would be just another form of retroactive ratemaking with incentives adverse to the efficiency fostered by genuine price caps.

service standard-based requirement."¹⁷ Performance-based rate authority is eligible to be authorized if both the operational-efficiency based and service-standard based requirements are met. For the operational-efficiency based requirement, the Postal Service's total factor productivity (TFP) "for the measured fiscal year must exceed the previous fiscal year."¹⁸ For the service-standard based requirement, the condition is "whether all of the Postal Service's service standards (including applicable business rules) for a class of mail for the applicable year met or exceeded the service standards in place during the prior fiscal year on a nationwide or substantially nationwide basis."¹⁹

26. The PRC states that the purpose of the proposed performance-based rate authority is to "promote greater capital investment and allow the Postal Service to reenter the financial health cycle by providing the Postal Service with additional revenue if it achieves the specific operational efficiency and service standard benchmarks. The financial health cycle requires the generation of 'adequate revenues to ensure net income, which provide retained earnings." The Order also states that the Postal Service hit its debt ceiling in FY 2012 and now struggles to finance capital investments (without retained earnings or borrowing authority). According to the Order, performance-based rate authority is based on the concept that without retained earnings,

¹⁷ Order at p. 149. The Order also states that the "Commission modifies proposed § 3010.200 with respect to the conditions necessary to receive the performance-based rate authority by removing the weighting attached to the operational efficiency-based requirement and the service performance benchmark. The 1 percentage point of rate authority will be allocated based on meeting both the operational efficiency-based requirement set forth in proposed § 3010.201 and the service standard-based requirement set forth in proposed § 3010.202." (Order at p. 149).

¹⁸ Order at p. 150.

¹⁹ Order, p. 150.

²⁰ Order, p. 105.

²¹ Order, p. 106.

the Postal Service is unable to finance capital investments needed to sustain its "financial health cycle". ²² In response to commenters, the PRC states that "having determined that additional revenue is required, the proposed performance-based rate authority serves as an incentive for the Postal Service to gain that additional revenue by first meeting the specific efficiency and service benchmarks."²³

B. Critique of Proposal

27. The PRC's proposed performance-based adder would grant the Postal Service an extra 1% of pricing authority above CPI each year if productivity improves by any amount over the previous year's productivity (assuming service-standard based requirements are also met each year, an assumption I make in the exposition below). Under this proposal, if the Postal Service's year-over-year productivity improves by a miniscule or an enormous amount, or anywhere in between, the pricing authority reward is identical: a 1% increase in pricing authority. In standard price cap theory, as in effectively competitive markets, productivity improvements provide their own reward: after a percentage of the incremental revenue is shared with consumers, the remainder is available for investing or falls to the bottom line in the form of higher retained earnings.²⁴ This system of rewards provides a strong incentive for the regulated entity to achieve improvements in productivity. The extra

²² Order at p. 106.

²³ Order at p. 117. The PRC further proposes a "requirement that the Postal Service file notice with the Commission each year that demonstrates whether or not performance-based rate authority is eligible to be authorized . . . the Commission will review the Postal Service's notice and any challenges to the notice under proposed § 3010.202(b) . the rate authority generated under the performance based rate authority will leave if unused 12 months after the

^{. .} the rate authority generated under the performance-based rate authority will lapse if unused, 12 months after the Commission's announcement, and shall not be used to generate unused rate authority or affect existing bank authority." (Order at pp. 149-150).

Moreover, basic microeconomic theory teaches that productivity improvements that lower marginal costs put *downward* pressure on prices not the reverse, ceteris paribus.

- reward of 1% in pricing authority for any incremental improvement in productivity is largely redundant and unnecessary.
- 28. Moreover, the extra reward of 1% in pricing authority could provide the perverse incentive for the Postal Service to *minimize* YOY improvements in productivity in order to make each subsequent year's YOY improvement in productivity easier to attain. That is, because the reward to the Postal Service is the same whether its productivity improvements are tiny or extraordinary, the Postal Service could game the system by seeking trivial positive productivity gains (or even negative ones) in Year 1 so that productivity improvements in Year 2 and subsequent years are easier to achieve. It is highly dysfunctional and problematic for a regulated entity, or any firm for that matter, to be presented with a disincentive to maximize productivity improvements each year.
- 29. This perverse incentive could also lead to perverse results. As mentioned, it is important that some of the benefits of a price cap system be passed on to consumers, as would be the case in a competitive market. See ¶ 14, supra. Here, the PRC's proposal not only fails to share a portion of the benefits of productivity growth with the Postal Service's customers, it actually threatens to make consumers worse off. If, for example, the Postal Service were to increase productivity by a miniscule amount, like 0.1 percent, consumers would have to pay 1 percent higher prices. Mailers would, paradoxically, be better off if the Postal Service's productivity declined by 0.1 percent.
- 30. In essence, the proposed productivity adder is a backward looking true-up that should be proscribed under a healthy system of incentive ratemaking. The proposed adjustment would ostensibly give the Postal Service money to fund

capital investments that are said to be unavailable to the Postal Service otherwise, at the expense of consumers, for the purpose of accomplishing further productivity gains that will only allow further increases to consumer prices. These are backward and counterproductive incentives and impacts.

- Rather than setting the proposed productivity adder on an annual, 31. retrospective basis, the productivity adder to the price cap should be set at a level based on the Postal Service's expected ability to improve productivity over the next 4-5 years. The productivity adder should be based on the CPI minus X, where X is a preestablished percentage inclusive of a productivity growth anticipation. Then the Postal Service's allowed pricing would reflect that anticipated level of productivity growth, and against that backdrop, every amount of achieved productivity growth would go to the bottom line of the enterprise. Thus, like a competitive firm with economically efficient incentives to attain lower costs, the Postal Service regulated in this fashion would have full dollar for dollar impact on its bottom line from diminutions in cost and increases in productivity. Rather than allowing the Postal Service to charge more for outcomes that already happened (which would in fact convert the system to cost of service with deferred revenue collection), and contrary to economic efficiency to charge more according to outcomes that resulted in cost savings, setting the regulatory policy up according to the concepts of price caps with pricing authority governed with a "price index minus X" formulation incentivizes the Postal Service to be more productive to an economically efficient degree.
- 32. The PRC's productivity adder proposal has additional flaws. Deviating from the teachings and goals of standard price cap theory, the PRC's proposal aims to generate revenue for increased capital investment to allow the Postal

Service to "reenter the financial health cycle," as noted above. There seems to be no reason to conclude that the proposed productivity adder would incentivize the Postal Service to improve productivity as appropriately as the built-in incentives under a "price index minus X" approach. Furthermore, there seems to be no reason to conclude that the proposed productivity adder provides an appropriate or economically efficient way to generate revenue for increased capital investment. The achievement of productivity improvements under a "price index minus X" approach will itself generate gains in net revenue appropriately scaled to compensate the entity for the needed capital investment. The PRC's proposal provides no such economically efficient connection between productivity gains, their financial benefits, and the cost of the investments needed to accomplish them.

CONCLUSION

33. The density and productivity proposals I have analyzed in this submission would predictably impart misincentives to the USPS and would likely allow unnecessarily large price increases relative to those needed to compensate for volume decreases and to motivate productivity increases.

Professor Robert Willig PhD